

REMARKS / ARGUMENTS

In the above-identified Office Action the Examiner has rejected claims 2, 4-6 as unpatentable over Weber et al. in view of Yoshida. The Examiner has stated that the Weber et al. reference teaches the crystal movement can be a controlling factor in crystal growth and that means that the pull rate is considered by the reference to be a factor and not just set point and, thus, the Examiner considers that the reference does, in fact, teach the invention. However, the Examiner has misconstrued either the reference or the invention. Weber et al. teaches limiting the growth fluctuations during the pulling of the single crystal to a certain amount (Weber et al., para. 8). Yoshida is used to modify the Weber et al. reference so that the diameter is used to create a uniform ingot to create uniform wafers.

Applicant's claim is directed to a method for manufacturing a single crystal semiconductor which controls the amount of increase or decrease in speed from the pulling up speed so as to make the deviation of the crystal diameter zero and limit the range of the pulling up speed so that the fluctuation in ten seconds is less than 0.025mm/min. Thus Applicant controls the variation of the speed in pulling up the seed crystal while Weber et al. limits the pulling up speed. Weber et al. does not limit the rate of change in pulling up speed as Applicant claims but, further, Weber et al. permits the pulling up speed to be sharply changes whereas Applicant limits the range of the change of pulling speed to a specific number. As a result, it is apparent that not only does Weber et al. have a different purpose but Weber et al. solves their problems in a different manor than Applicant. Weber et al. does not suggest any relationship between the change in the pulling up speed and the variation in impurity concentration. Rather, Weber et al. is trying to reduce growth fluctuations of the single crystal and Applicant is attempting to decrease the variation in impurity concentration.

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To summarize, Weber et al. controls the growth fluctuations of the silicon single crystal during the pulling up of the crystal by selecting a low pulling rate. Applicant makes the impurity concentrations in the silicon single crystal more uniformed by controlling the amount of increase of decrease in speed from the pulling up speed so that the deviation from a selected target value of the crystal diameter is zero and sending a limit to the range of the pulling up speed so that the pulling up speed fluctuation is controlled. These are two different inventions and the teachings of Weber et al. does not suggest that the invention is now recited in the claims nor does the addition of Yoshida supply any deficiencies in the teachings of Weber et al. to so do.

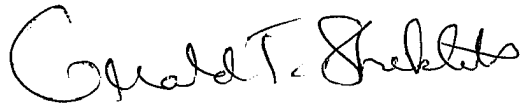
Applicant hereby requests reconsideration and reexamination thereof.

No further fee or petition is believed to be necessary. However, should any further fee be needed, please charge our Deposit Account No. 23-0920, and deem this paper to be the required petition.

With the above amendments and remarks, this application is considered ready for allowance and applicant earnestly solicits an early notice of same. Should the Examiner be of the opinion that a telephone conference would expedite prosecution of the subject application, he/she is respectfully requested to call the undersigned at the below listed number.

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Respectfully submitted,

A handwritten signature in black ink, appearing to read "Gerald T. Shekleton". The signature is fluid and cursive, with the first name "Gerald" being more prominent than the last name "Shekleton".

Dated: 24 February 2010

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